PATENT ABSTRACTS OF JAPAN

(11)Publication number: 2001-142855

(43)Date of publication of application: 25.05.2001

(51)Int.CI. G06F 15/16

G06F 13/00

G09C 1/00

G11B 20/10

H04L 9/32

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(54) DEVICE AND METHOD FOR PROCESSING INFORMATION, AND PROGRAM STORAGE MEDIUM

(57)Abstract:

PROBLEM TO BE SOLVED: To easily acquire information from an information providing device, which requests a different procedure.

SOLUTION: A display operation instruction program 112 requests the transmission of information corresponding to contents to a WWW server 5-1 on the basis of a first procedure. The display operation instruction program 112 requests the transmission

of information corresponding to contents to a WWW server 5-2 on the basis of a second procedure. The display operation instruction program 02 sets any one of WWW servers 5-1 and 5-2, selects any one of them on the basis of setting and requests the transmission of information.

LEGAL STATUS [Date of request for examination] 03.03.2006

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]

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CLAIMS

[Claim(s)]

[Claim 1] In the information processor which reads the contents currently recorded on the information record medium 1st demand means to require transmission of the information corresponding to said contents of the 1st information offer equipment based on the 1st procedure, 2nd demand means to require transmission of the information corresponding to said contents of the 2nd information offer equipment based on the 2nd procedure, The information processor characterized by including a

setting means to set up said 1st information offer equipment or said 2nd information offer equipment, and a selection means to choose said 1st demand means or said 2nd demand means based on a setup of said setting means.

[Claim 2] In the information processing approach of the information processor which reads the contents currently recorded on the information record medium The 1st demand step which requires transmission of the information corresponding to said contents of the 1st information offer equipment based on the 1st procedure, The 2nd demand step which requires transmission of the information corresponding to said contents of the 2nd information offer equipment based on the 2nd procedure, The setting step which sets up said 1st information offer equipment or said 2nd information offer equipment, The information processing approach characterized by including the selection step which chooses processing of said 1st demand step, or processing of said 2nd demand step based on a setup by processing of said setting step.

[Claim 3] It is a program for information processing processing of the information processor which reads the contents currently recorded on the information record medium. The 1st demand step which requires transmission of the information corresponding to said contents of the 1st information offer equipment based on the 1st procedure, The 2nd demand step which requires transmission of the information corresponding to said contents of the 2nd information offer equipment based on the 2nd procedure, The setting step which sets up said 1st information offer equipment or said 2nd information offer equipment, The program storing medium which makes an information processor perform the program characterized by consisting of a selection step which chooses processing of said 1st demand step, or processing of said 2nd demand step based on a setup by processing of said setting step.

DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]

[Field of the Invention] Especially this invention relates to a program storing medium at the information processor which acquires information from information offer equipment about a program storing medium in an information processor and an approach, and a list and an approach, and a list.

[0002]

[Description of the Prior Art] Information processors, such as a personal computer, can acquire the data corresponding to the music data currently recorded on CD (Compact Disc) with which it was equipped from a predetermined server through the Internet etc.

[0003]

[Problem(s) to be Solved by the Invention] However, for example, in a usual Web server or usual CDDB, the data corresponding to music data were acquired by program which the procedure demanded differs and is different, respectively, and if it was ******, they were ** and serious trouble.

[0004] This invention is made in view of such a situation, and it aims at enabling it to acquire information from the information offer equipment which requires a simply different procedure.

[0005]

[Means for Solving the Problem] 1st demand means by which an information processor according to claim 1 requires transmission of the information corresponding to contents of the 1st information offer equipment based on the 1st procedure, 2nd demand means to require transmission of the information corresponding to contents of the 2nd information offer equipment based on the 2nd procedure, It is characterized by including a setting means to set up the 1st information offer equipment or the 2nd information offer equipment, and a selection means to choose the 1st demand means or the 2nd demand means based on a setup of a setting means. [0006] The 1st demand step as which the information processing approach according to claim 2 requires transmission of the information corresponding to contents of the 1st information offer equipment based on the 1st procedure, The 2nd demand step which requires transmission of the information corresponding to contents of the 2nd information offer equipment based on the 2nd procedure, It is characterized by including the setting step which sets up the 1st information offer equipment or the 2nd information offer equipment, and the selection step which chooses processing of the 1st demand step, or processing of the 2nd demand step based on a setup by processing of a setting step.

[0007] The program of a program storing medium according to claim 3 The 1st demand step which requires transmission of the information corresponding to contents of the 1st information offer equipment based on the 1st procedure, The 2nd demand step which requires transmission of the information corresponding to contents of the 2nd information offer equipment based on the 2nd procedure, It is characterized by consisting of a setting step which sets up either the 1st information offer equipment or the 2nd information offer equipment, and a selection step which chooses processing of the 1st demand step, or processing of the 2nd demand step based on a setup by processing of a setting step.

[0008] In an information processor according to claim 1, the information processing

approach according to claim 2, and a program storing medium according to claim 3 Based on the 1st procedure, transmission of the information corresponding to contents is required of the 1st information offer equipment. Based on the 2nd procedure, transmission of the information corresponding to contents is required of the 2nd information offer equipment, the 1st information offer equipment or the 2nd information offer equipment is set as it, and the 1st demand means or the 2nd demand means is chosen as it based on a setup.

[0009]

[Embodiment of the Invention] <u>Drawing 1</u> is drawing showing the gestalt of 1 operation of the music data management system concerning this invention. The personal computer 1 is connected to the network 2 which consists of a Local Area Network or the Internet. the sound read in CD (Compact Disc) which received the personal computer 1 from the EMD (Elecrical Music Distribution) server 4–1 thru/or 4–3, or is mentioned later — while changing easy data (contents are called hereafter) into the method (for example, ATRAC3 (trademark)) of predetermined compression, it enciphers and records with cipher systems, such as DES (Data Encryption Standard). [0010] A personal computer 1 records the data of use conditions in which the use conditions of contents are shown corresponding to the contents currently enciphered and recorded. It is shown that the contents corresponding to the data of the use condition can be copied [which can be used by three sets (Portable Device (it is also called PD)) of the portable devices 6–1 and 6–3] to coincidence for example, that the data of use conditions are movable to other personal computers, etc. The detail of the data of use conditions is mentioned later.

[0011] A personal computer 1 updates the data of the use conditions corresponding to the contents which made them memorize corresponding to having made the portable device 6–1 memorize while storing the contents currently enciphered and recorded in the portable device 6–1 connected (check-out is called hereafter). A personal computer 1 updates the data of the use conditions corresponding to the contents which made them memorize corresponding to having made the portable device 6–2 memorize while storing the contents currently enciphered and recorded in the portable device 6–2 connected. A personal computer 1 updates the data of the use conditions corresponding to the contents which made them memorize corresponding to having made the portable device 6–3 memorize while storing the contents currently enciphered and recorded in the portable device 6–3 connected.

[0012] Moreover, a personal computer 1 updates the data of the use conditions corresponding to the contents which made the portable device 6-1 eliminate the contents memorized by the portable device 6-1 connected, and made them eliminate (check-in is called hereafter). A personal computer 1 updates the data of the use conditions corresponding to the contents which made the portable device 6-2 eliminate the contents memorized by the portable device 6-2 connected, and made

them eliminate. A personal computer 1 updates the data of the use conditions corresponding to the contents which made the portable device 6–3 eliminate the contents memorized by the portable device 6–3 connected, and made them eliminate. [0013] When a personal computer 1 starts acquisition of contents from the EMD server 4–1 thru/or 4–3, the EMD registration server 3 transmits the program for connecting with the EMD server 4–1 thru/or 4–3 to a personal computer 1 while transmitting a personal computer 1, the EMD server 4–1, or an authentication key required for the mutual recognition of 4–3 to a personal computer 1 through a network 2 corresponding to the demand of a personal computer 1.

[0014] The EMD server 4-1 supplies contents to a personal computer 1 through a network 2 corresponding to the demand of a personal computer 1. The EMD server 4-2 supplies contents to a personal computer 1 through a network 2 corresponding to the demand of a personal computer 1. The EMD server 4-3 supplies contents to a personal computer 1 through a network 2 corresponding to the demand of a personal computer 1.

[0015] The contents which the EMD server 4-1 thru/or each of 4-3 supply are compressed by the same or different compressive method. The contents which the EMD server 4-1 thru/or each of 4-3 supply are enciphered by the same or different method of encryption.

[0016] The WWW (World Wide Web) server 5–1 supplies the data (for example, a music name or a composer name etc.) corresponding to the contents read in CDs (for example, the album name of CD or the selling firm of CD etc.) and CD which read contents to a personal computer 1 through a network 2 corresponding to the demand of a personal computer 1. The WWW server 5–2 supplies the data corresponding to the contents read in CD and CD which read contents to a personal computer 1 through a network 2 corresponding to the demand of a personal computer 1.

[0017] The portable device 6-1 memorizes the contents (namely, checked-out contents) supplied from the personal computer 1. The portable device 6-1 is reproduced and outputs the memorized contents to the beef fat phon which is not illustrated. A user can reproduce the memorized contents which removed the portable device 6-1 which memorized contents from the personal computer 1, and walked around with, and can listen to the music corresponding to contents etc. by headphone etc.

[0018] The portable device 6-2 memorizes the contents supplied from the personal computer 1. The portable device 6-2 is reproduced and outputs the memorized contents to the beef fat phon which is not illustrated. A user can reproduce the memorized contents which removed the portable device 6-2 which memorized contents from the personal computer 1, and walked around with, and can listen to the music corresponding to contents etc. by headphone etc.

[0019] The portable device 6-3 memorizes the contents supplied from the personal

computer 1. The portable device 6-3 is reproduced and outputs the memorized contents to the beef fat phon which is not illustrated. A user can reproduce the memorized contents which removed the portable device 6-3 which memorized contents from the personal computer 1, and walked around with, and can listen to the music corresponding to contents etc. by headphone etc.

[0020] <u>Drawing 2</u> is drawing explaining the configuration of a personal computer 1. CPU (Central Processing Unit)11 actually performs various application programs (for details, it mentions later) and OS (Operating System). Generally ROM (Read-only Memory)12 stores the data of immobilization fundamentally of the parameters the program which CPU11 uses, and for an operation. RAM (Random-Access Memory)13 stores a variable parameter suitably in the program used in activation of CPU11, and its activation. These are mutually connected by the host bus 14 which consists of CPU buses etc.

[0021] The host bus 14 is connected to the external buses 16, such as a PCI (Peripheral Component Interconnect/Interface) bus, through the bridge 15.

[0022] A keyboard 18 is operated by the user when inputting various kinds of commands into CPU11. A mouse 19 is operated by the user when performing the directions and selection of the point on the screen of a display 20. A display 20 consists of a liquid crystal display or CRT (Cathode Ray Tube), and displays various information in a text or an image. HDD (Hard Disk Drive)21 drives a hard disk, and records or reproduces the program and information which are performed by CPU11 to them.

[0023] Drive 22 reads the data or the program currently recorded on the magnetic disk 41 with which it is equipped, an optical disk 42 (CD is included), a magneto-optic disk 43, or semiconductor memory 44, and supplies the data or program to RAM13 with which it connects through the interface 17, the external bus 16, the bridge 15, and the host bus 14.

[0024] The portable device 6-1 is connected to the USB (Universal Sirial Bus) port 23-1 through a predetermined cable. The USB port 23-1 outputs the data (for example, the command of contents or the portable device 6-1 etc. is included) supplied from HDD21, CPU11, or RAM13 to the portable device 6-1 through an interface 17, an external bus 16, a bridge 15, or the host bus 14.

[0025] The portable device 6-2 is connected to the USB port 23-2 through a predetermined cable. The USB port 23-2 outputs the data (for example, the command of contents or the portable device 6-2 etc. is included) supplied from HDD21, CPU11, or RAM13 to the portable device 6-2 through an interface 17, an external bus 16, a bridge 15, or the host bus 14.

[0026] The portable device 6-3 is connected to the USB port 23-3 through a predetermined cable. The USB port 23-3 outputs the data (for example, the command of contents or the portable device 6-3 etc. is included) supplied from HDD21, CPU11,

or RAM13 to the portable device 6-3 through an interface 17, an external bus 16, a bridge 15, or the host bus 14.

[0027] A loudspeaker 24 outputs the predetermined voice corresponding to contents the data supplied from the interface 17, or based on a sound signal.

[0028] These keyboards 18 thru/or loudspeakers 24 is connected to the interface 17, and the interface 17 is connected to CPU11 through the external bus 16, the bridge 15, and the host bus 14.

[0029] A network 2 is connected and the communications department 25 stores in the packet of a predetermined method the data (for example, the demand of registration or the Request to Send of contents etc.) supplied from CPU11 or HDD21. While transmitting through a network 2, the data (for example, an authentication key or contents etc.) stored in the packet which received are outputted to CPU11, RAM13, or HDD21 through a network 2.

[0030] The communications department 25 is connected to CPU11 through the external bus 16, the bridge 15, and the host bus 14.

[0031] Drawing 3 is drawing explaining the configuration of the EMD registration server 3. CPU61 actually performs application programs, such as a Web server program, and OS. Generally ROM62 stores the data of immobilization fundamentally of the parameters the program which CPU61 uses, and for an operation. RAM63 stores a variable parameter suitably in the program used in activation of CPU61, and its activation. These are mutually connected by the host bus 64 which consists of CPU buses etc.

[0032] The host bus 64 is connected to the external buses 66, such as a PCI bus, through the bridge 65.

[0033] A keyboard 68 is operated by the user when inputting various kinds of commands into CPU61. A mouse 69 is operated by the user when performing the directions and selection of the point on the screen of a display 70. A display 70 consists of a liquid crystal display or CRT, and displays various information in a text or an image. HDD71 drives a hard disk, and records or reproduces the program and information which are performed by CPU61 to them.

[0034] Drive 72 reads the data or the program currently recorded on the magnetic disk 91 with which it is equipped, an optical disk 92, a magneto-optic disk 93, or semiconductor memory 94, and supplies the data or program to RAM63 with which it connects through the interface 67, the external bus 66, the bridge 65, and the host bus 64.

[0035] These keyboards 68 thru/or drives 72 is connected to the interface 67, and the interface 67 is connected to CPU61 through the external bus 66, the bridge 65, and the host bus 64.

[0036] A network 2 is connected and the communications department 73 minds a network 2. While outputting the data (for example, data required for the registration

mentioned later or ID of a predetermined program (Identifier) etc.) stored in the packet which received to CPU61, RAM63, or HDD71 The data (for example, a predetermined number of authentication keys or a program etc.) supplied from CPU61 or HDD71 are stored in the packet of a predetermined method, and it transmits through a network 2.

[0037] The communications department 73 is connected to CPU61 through the external bus 66, the bridge 65, and the host bus 64.

[0038] Since the WWW server 5-1 and each configuration of 5-2 are the same as the configuration of the EMD registration server 3 in the EMD server 4-1 thru/or 4-3, and a list, the explanation is omitted.

[0039] Next, the function realized when a personal computer 1 performs a predetermined program is explained.

[0040] <u>Drawing 4</u> is a block diagram explaining the configuration of the function of a personal computer 1 realized by the predetermined program execution of CPU11 etc. The contents manager 111 consists of two or more programs, such as the EMD selection program 131, check-in/check-out manager 132, the cipher system conversion program 133, the compression method conversion program 134, the encryption program 135, the use condition conversion program 136, the signature manager 137, the authentication program 138, the decode program 139, the driver 140 for PD, the driver 141 for purchase, and the driver 142 for purchase.

[0041] the contents manager 111 — for example, it is described by the instruction currently shuffled or the instruction enciphered, the contents of processing are concealed from the outside, and reading comprehension of the contents of processing becomes difficult (for example, a user cannot specify an instruction, even if it reads the contents manager 111 directly) — it is constituted like.

[0042] When the contents manager 111 is installed in a personal computer 1, the EMD selection program 131 is not included in the contents manager 111, but is received from the EMD registration server 3 through a network 2 in processing of the registration of EMD mentioned later. The EMD selection program 131 chooses connection with the EMD server 4–1 thru/or either of 4–3, and makes the application 115 for purchase, the driver 141 for purchase, or 142 perform the communication links (for example, download of contents when purchasing contents etc.) with the EMD server 4–1 thru/or either of 4–3.

[0043] Check-in/check-out manager 132 checks in at the contents which check out the contents stored in the contents file 161-1 thru/or 161-N based on the use condition file 162-1 thru/or 162-N currently recorded on check-in or a setup of check-out, and the contents database 114 to the portable device 6-1 thru/or either of 6-3, or are memorized by the portable device 6-1 thru/or 6-3.

[0044] Check-in/check-out manager 132 updates the data of the use conditions stored in the use condition file 162-1 thru/or 162-N currently recorded on the

contents database 114 corresponding to processing of check-in or check-out.

[0045] The method of encryption of contents with which the application program 115 for purchase received the cipher system conversion program 133 from the EMD server 4–1 through the network 2, The method of encryption of the contents which the driver 141 for purchase received from the EMD server 4–2, Or the method of encryption of the contents which the driver 142 for purchase received from the EMD server 4–3 is transformed into the method of the same encryption as the contents stored in the contents file 161–1 thru/or 161–N which the contents database 114 is recording.

[0046] Moreover, the cipher system conversion program 133 changes the contents to check out into the portable device 6-1 or a cipher system with available 6-3, when you check out contents to the portable device 6-1 or 6-3.

[0047] The method of compression of contents with which the application program 115 for purchase received the compression method conversion program 134 from the EMD server 4–1 through the network 2. The method of compression of the contents which the driver 141 for purchase received from the EMD server 4–2. Or the method of compression of the contents which the driver 142 for purchase received from the EMD server 4–3 is transformed into the method of the same compression as the contents stored in the contents file 161–1 thru/or 161–N which the contents database 114 is recording.

[0048] Moreover, the compression method conversion program 134 changes the contents to check out into the portable device 6-1 or the method of compression with available 6-3, when you check out contents to the portable device 6-1 or 6-3.

[0049] It is read in CD and the encryption program 135 is enciphered by the method of the same encryption as the contents stored in the contents file 161-1 whose contents database 114 is recording the contents (not enciphered) supplied from the sound recording program 113 thru/or 161-N.

[0050] the data (being the so-called —) which, as for the use condition conversion program 136, the application program 115 for purchase shows the use conditions of the contents which received from the EMD server 4–1 through a network 2 Usage Rule, the data in which the use conditions of the contents which the driver 141 for purchase received from the EMD server 4–2 are shown, Or the data in which the use conditions of the contents which the driver 142 for purchase received from the EMD server 4–3 are shown are changed into the same format as the use condition data stored in the use condition file 162–1 thru/or 162–N which the contents database 114 is recording.

[0051] Moreover, the use condition conversion program 136 changes the data of the use conditions corresponding to the contents to check out into the data of the portable device 6-1 or use conditions with available 6-3, when you check out contents to the portable device 6-1 or 6-3.

[0052] The signature manager 137 detects the alteration of the data of use conditions based on the signature (it mentions later) included in the data of the use conditions stored in the use condition file 162-1 thru/or 162-N currently recorded on the contents database 114, before performing processing of check-in or check-out. The signature manager 137 updates the signature included in the data of use conditions corresponding to updating in the data of the use conditions stored in the use condition file 162-1 thru/or 162-N accompanying processing of check-in or check-out currently recorded on the contents database 114.

[0053] The authentication program 138 performs processing of the mutual recognition of the contents manager 111 and the application program 115 for purchase, and processing of the mutual recognition of the contents manager 111 and the driver 141 for purchase. Moreover, the authentication program 138 has memorized the authentication key used by processing of the mutual recognition of the EMD server 4–1 and the application program 115 for purchase, processing of the mutual recognition of the EMD server 4–2 and the driver 141 for purchase, and processing of the mutual recognition of the EMD server 4–3 and the driver 142 for purchase.

[0054] The authentication key which the authentication program 138 uses by processing of mutual recognition is not memorized by the authentication program 138 when the contents manager 111 is installed in a personal computer 1, but when processing of registration is normally performed by the display operator guidance program 112, is supplied from the EMD registration server 3, and is memorized by the authentication program 138.

[0055] The decode program 139 decodes contents, when a personal computer 1 reproduces the contents stored in the contents file 161-1 thru/or 161-N which the contents database 114 is recording.

[0056] The driver 140 for PD supplies the command which makes the portable device 6-2 perform predetermined processing to contents or the portable device 6-2, when you check out predetermined contents to the portable device 6-2, or when you check in at predetermined contents from the portable device 6-2.

[0057] The driver 140 for PD supplies the command which performs predetermined processing to contents or a device driver 116-1 to a device driver 116-1, when you check out predetermined contents to the portable device 6-1, or when you check in at predetermined contents from the portable device 6-1.

[0058] The driver 140 for PD supplies the command which performs predetermined processing to contents or a device driver 116-2 to a device driver 116-2, when you check out predetermined contents to the portable device 6-3, or when you check in at predetermined contents from the portable device 6-3.

[0059] It is the so-called plug-in program, and the driver 141 for purchase is installed with the contents manager 111, is supplied through a network 2 from the EMD registration server 3, or it is recorded on predetermined CD and supplied. The driver

141 for purchase transmits and receives the contents manager 111 and data through the interface of the predetermined format which the contents manager 111 has, when installed in a personal computer 1.

[0060] The driver 141 for purchase receives contents from the EMD server 4–2 while requiring transmission of predetermined contents of the EMD server 4–2 through a network 2. Moreover, the driver 141 for purchase performs processing of accounting, when receiving contents from the EMD server 4–2.

[0061] The driver 142 for purchase is a program installed with the contents manager 111, and it receives contents from the EMD server 4–3 while it requires transmission of predetermined contents of the EMD server 4–3 through a network 2. Moreover, the driver 142 for purchase performs processing of accounting, when receiving contents from the EMD server 4–3.

[0062] The display operator guidance program 112 displays the image of a predetermined window on a display 20 based on the filtering data file 181, the display data file 182, an image file 183-1, 183-K, or the hysteresis data file 184, and directs activation of processings, such as check-in or check-out, based on the actuation to a keyboard 18 or a mouse 19 at the contents manager 111.

[0063] The filtering data file 181 stores the data for making weighting each contents stored in the contents file 161-1 thru/or 161-N currently recorded on the contents database 114, and is recorded on HDD21.

[0064] The display data file 182 stores the data corresponding to the contents stored in the contents file 161-1 thru/or 161-N currently recorded on the contents database 114, and is recorded on HDD21.

[0065] An image file 183-1 thru/or 183-K store the image corresponding to the contents file 161-1 thru/or 161-N currently recorded on the contents database 114, or the image corresponding to the package mentioned later, and is recorded on HDD21.

[0066] Hereafter, when it is not necessary to distinguish an image file 183-1 thru/or 183-K separately, an image file 183 is only called.

[0067] The contents stored in the contents file 161-1 thru/or 161-N currently recorded on the contents database 114 store historical data, such as a checked-out count, a count at which he checked in, and its date, and the hysteresis data file 184 is recorded on HDD21.

[0068] The display operator guidance program 112 receives the key for authentication, and the EMD selection program 131 from the EMD registration server 3, and supplies the key for authentication, and the EMD selection program 131 to the contents manager 111 while it transmits ID of the contents manager 111 beforehand memorized to the EMD registration server 3 through a network 2 at the time of processing of registration.

[0069] The sound recording program 113 displays the image of a predetermined

window, and reads data, such as sound recording time amount of contents, from CD which is the optical disk 42 with which the drive 22 was equipped based on the actuation to a keyboard 18 or a mouse 19.

[0070] The sound recording program 113 minds a network 2 based on the sound recording time amount of the contents currently recorded on CD etc. While requiring transmission of the data (for example, music name etc.) corresponding to the contents currently recorded on the WWW server 5–1 or 5–2 by the data (for example, an album name or an artist name etc.) or CD corresponding to CD The data corresponding to the contents currently recorded on the data or CD corresponding to CD from the WWW server 5–1 or 5–2 are received.

[0071] The sound recording program 113 supplies the data corresponding to the contents currently recorded on the data or CD corresponding to received CD to the display operator guidance program 112.

[0072] Moreover, when directions of sound recording are inputted, the sound recording program 113 reads contents from CD which is the optical disk 42 with which the drive 22 was equipped, and outputs them to the contents manager 111.

[0073] The contents which the contents database 114 is compressed by the predetermined method supplied from the contents manager 111, and are enciphered by the predetermined method are stored in either the contents file 161-1 thru/or 161-N (it records on HDD21). The contents database 114 is stored in either the contents file 161-1 for which the data of the use conditions corresponding to the contents stored in the contents file 161-1 thru/or 161-N, respectively are stored in contents the use condition file 162-1 respectively corresponding to 161-N thru/or 162-N (it records on HDD21).

[0074] The contents database 114 may record the contents file 161-1 thru/or 161-N or the use condition file 162-1 thru/or 162-N as a record.

[0075] For example, the data of the use conditions corresponding to the contents stored in the contents file 161-1 are stored in the use condition file 162-1. The data of the use conditions corresponding to the contents stored in contents file 161-N are stored in use condition file 162-N.

[0076] Hereafter, when it is not necessary to distinguish the contents file 161-1 thru/or 161-N separately, the contents file 161 is only called. Hereafter, when it is not necessary to distinguish the use condition file 162-1 thru/or 162-N separately, the use condition file 162 is only called.

[0077] <u>Drawing 5</u> is drawing showing the example of the data of the use conditions stored in the use condition file 162-1 thru/or 162-N. Content ID is data which specify the contents stored in each of the contents file 161-1 or 161-N. When the value of either "YES" or "NO" is set up and "YES" is set up possible [check-out], the contents manager 111 can check out the contents specified by content ID to the portable device 6-1 thru/or either of 6-3. When "NO" is set up possible [check-out],

the contents manager 111 checks out the contents specified by content ID to the portable device 6-1 thru/or neither of 6-3.

[0078] The count of the check-out which can perform the contents manager 111 is set to the count which can be checked out. When the contents manager 111 performs check-out once, the decrement of the count which can be checked out is carried out. When the contents manager 111 performs check-in once, the increment of the count which can be checked out is carried out.

[0079] When check-out is performed and the count which can be checked out is set to "0" from "1", "NO" is set up possible [check-out]. When check-in is performed and the count which can be checked out is set to "1" from "0", "YES" is set up possible [check-out].

[0080] MUBU [the contents manager 111 / the contents specified by content ID] when the value of either "YES" or "NO" is set up and "YES" is set up possible [MUBU]. MUBU [the contents manager 111 / the contents specified by content ID] when "NO" is set up possible [MUBU].

[0081] When the value of either "YES" or "NO" is set up and "YES" is set up possible [a copy], the contents manager 111 can copy the contents specified by content ID. When "NO" is set up possible [a copy], the contents manager 111 does not copy the contents specified by content ID.

[0082] The count of the copy which can perform the contents manager 111 is set to the count which can be copied.

[0083] The periods (check-out or playback) which can use the contents specified by content ID are described at the expiration date.

[0084] The areas (check—out or playback) (for example, Japan or the whole world etc.) which can use the contents specified by content ID are described by the usable area. [0085] The data (signature data are called hereafter) which the signature manager 137 generates are stored in a signature based on the data set as content ID thru/or an usable area. Signature data are used for detection of an alteration of the data of use conditions. On the other hand, the algorithm which generates the signature data of the signature manager 137 is a tropism function, and since it is not exhibited, it is difficult to generate right signature data based on the data set as content ID thru/or an usable area except those who supply the contents manager 111.

[0086] The application program 115 for purchase is supplied through a network 2 from the EMD registration server 3, or is recorded on predetermined CD and supplied. The application program 115 for purchase receives contents from the EMD server 4–1, and supplies them to the contents manager 111 while it requires transmission of predetermined contents of the EMD server 4–1 through a network 2. Moreover, the application program 115 for purchase performs processing of accounting, when receiving contents from the EMD server 4–1.

[0087] Next, matching with the contents file 161-1 thru/or 161-N stored in the data

stored in the display data file 82 and a contents database is explained.

[0088] The contents stored in either the contents file 161-1 thru/or 161-N belong to a predetermined package. A package is either an original package and my selection package or a filtering package more at a detail.

[0089] One or more contents belong and an original package is equivalent to the classification (for example, it corresponds to the so-called album) of the EMD server 4–1 thru/or the contents in 4–3, or CD of one sheet. Contents cannot belong to one of original packages, and cannot belong to two or more original packages. Moreover, the original package with which contents belong cannot be changed. A user can edit a part of information corresponding to an original package (modification of the information which information added or added).

[0090] <u>Drawing 6</u> is drawing explaining the example of relation with the original package, the indicative data 201 for an original package which specifies the relation of contents, the contents file 161-1, or 161-N contained in the display data file 182. The indicative data 201 for an original package contains the indicative data 211-1 for a package thru/or 221-M.

[0091] The indicative data 211-1 for a package is mutually related with the data 221-1-1 for a contents display thru/or 221-1-i.

[0092] The data 221-1-1 for a contents display support the contents stored in the contents file 161-1. The data of the use conditions of the contents stored in the contents file 161-1 are stored in the use condition file 162-1.

[0093] The data 221-1-2 for a contents display support the contents stored in the contents file 161-2. The data of the use conditions of the contents stored in the contents file 161-2 are stored in the use condition file 162-2.

[0094] Data 221-1-i for a contents display supports the contents stored in contents file 161-q. The data of the use conditions of the contents stored in contents file 161-q are stored in use condition file 162-q.

[0095] The indicative data 211-2 for a package is mutually related with the data 221-2-1 for a contents display thru/or 221-2-j.

[0096] The data 221-2-1 for a contents display support the contents stored in contents file 161-(q+1). The data of the use conditions of the contents stored in contents file 161-(q+1) are stored in use condition file 162-(q+1).

[0097] The data 221-2-2 for a contents display support the contents stored in contents file 161-(q+2). The data of the use conditions of the contents stored in contents file 161-(q+2) are stored in use condition file 162-(q+2).

[0098] Data 221-2-j for a contents display supports the contents stored in contents file 161-r. The data of the use conditions of the contents stored in contents file 161-r are stored in use condition file 162-r.

[0099] Similarly, indicative-data 211-M for a package is mutually related with the data 221-M-1 for a contents display thru/or 221-M-p.

[0100] Data 221-M-p for a contents display supports the contents stored in contents file 161-N. The data of the use conditions of the contents stored in contents file 161-N are stored in use condition file 162-N.

[0101] Hereafter, when it is not necessary to distinguish the indicative data 211-1 for a package thru/or 211-M separately, the indicative data 211 for a package is only called. Hereafter, when it is not necessary to distinguish the data 221-1-1 for a contents display thru/or 221-M-p separately, the data 221 for a contents display are only called.

[0102] Hereafter, when it is not necessary to distinguish the contents file 161-1 thru/or 161-N separately, the contents file 161 is only called. Hereafter, when it is not necessary to distinguish the use condition file 162-1 thru/or 162-N separately, the use condition file 162 is only called.

[0103] Drawing 7 is drawing showing the example of a configuration of the display data file 182. Drawing 7 (A) is drawing showing the example of the indicative data 221 for a package. The indicative data 221 for a package consists of the data of the package class for identifying either a data [of the package ID which specifies a package], original package, and my selection package, or a filtering package, the data of a package name, the data of an artist name, data of a genre name, data in which the image file name in which the image corresponding to a package is stored is shown, and data of the content ID corresponding to one or more contents belonging to a package. The information corresponding to the original package added by the user is added to the indicative data 221 for a package as data which are not illustrated.

[0104] <u>Drawing 7</u> (B) is drawing showing the example of the data 221 for a contents display. The data 221 for a contents display consist of the data of the original package ID for specifying the original package with which the data of content ID and corresponding contents belong, data of a music name, data of the count of check-out, and data in which the image file name in which the image corresponding to contents is stored is shown.

[0105] Furthermore, the display data file 182 is made to correspond to content ID, and you may make it record a kind of data and data, as shown in drawing 7 (C).

[0106] One or more contents from which the user chose the my selection package as arbitration belong. A user can edit into arbitration whether which contents belong to a my selection package. Contents can belong to one or more my selection packages at coincidence. Moreover, contents do not need to belong to which my selection package. [0107] Drawing 8 is drawing explaining relation with the indicative data 241 for a my selection package, the contents file 161–1, or 161–N belonging to the display data file 182 which specifies the relation between a my selection package and contents. The indicative data 241 for a my selection package contains the indicative data 251–1 for a package thru/or 251–S.

[0108] The indicative data 251-1 for a package is related with the data

221-1-1,221-2-2 for a contents display, or 221-1-i corresponding to the setup of a

[0109] The indicative data 251-2 for a package is related with data 221-2-j for a contents display, 221-3-1, 221-1-2, etc. corresponding to the setup of a user.

[0110] Similarly, indicative-data 251-S for a package is related with the data 221-2-2,221-2-1 for a contents display, or 221-1-i corresponding to the setup of a user.

[0111] Hereafter, when it is not necessary to distinguish the indicative data 251-1 for a package thru/or 251-S separately, the indicative data 251 for a package is only called.

[0112] Since it has the same structure as the indicative data 221 for a package explained with reference to <u>drawing 7</u> (A), the indicative data 251 for a package omits the explanation.

[0113] Thus, a user can make the contents of arbitration belong to a my selection package, and one contents may belong to two or more my selection packages.

[0114] The contents chosen based on the filtering data stored in the filtering data file 181 belong to a filtering package. Filtering data are supplied through a network 2 from the EMD server 4–1 thru/or 4–3, the WWW server 5–1, 5–2, etc., or are recorded on predetermined CD and supplied. A user can edit the filtering data stored in the filtering data file 181.

[0115] Filtering data serve as criteria which choose predetermined contents or compute the weight corresponding to contents. For example, if the filtering data corresponding to the J-POP (pop of Japan) top ten of this week are used, a personal computer 1 can specify the contents of the 1st place of the pop of Japan of this week thru/or the contents of the 10th place of the pop of Japan of this week.

[0116] The filtering data file 181 contains the filtering data with which the period checked out in January [past] chooses contents as long order, the filtering data which choose contents with many counts checked out at past half a year, or the filtering data which chooses the contents by which the alphabetic character of "love" is contained in the music name.

[0117] Thus, the contents of a filtering package make the indicative data 221 (the data which the user set as the indicative data 221 for contents are included) for contents corresponding to contents or historical data 184, and filtering data correspond, and are chosen.

[0118] <u>Drawing 9</u> is drawing explaining relation with the indicative data 281 for a filtering package, the contents file 161-1, or 161-N belonging to the display data file 182 which specifies the relation between a filtering package and contents. The indicative data 281 for a filtering package contains the indicative data 291-1 for a package thru/or 291-A.

[0119] The indicative data 291-1 for a package is related with the data

- 221-2-2,221-1-2 for a contents display, 221-M-p, etc.
- [0120] The indicative data 291-2 for a package is related with data 221-1-i for a contents display, 221-2-j, 221-2-2, etc.
- [0121] Similarly, indicative-data 291-A for a package is related with data 221-1-i for a contents display, 221-2-j, 221-2-2, etc.
- [0122] Hereafter, when it is not necessary to distinguish the indicative data 291-1 for a package thru/or 291-A separately, the indicative data 291 for a package is only called.
- [0123] Since it has the same structure as the indicative data 221 for a package explained with reference to <u>drawing 7</u> (A), the indicative data 291 for a package omits the explanation.
- [0124] Thus, the predetermined contents chosen by processing of a personal computer 1 may belong to a filtering package, and one contents may belong to two or more filtering packages.
- [0125] Next, processing of registration of EMD is explained with reference to <u>drawing 10</u>. When installing the contents manager 111 and the display operator guidance program 112 in a personal computer 1 and starting the display operator guidance program 112 for the first time, the display operator guidance program 112 is connected to the EMD registration server 3 through a network 2 with reference to URL (Uniform Resource Locator) beforehand memorized inside.
- [0126] The EMD registration server 3 transmits the data on which the screen for performing processing of registration is displayed to the display operator guidance program 112. The display operator guidance program 112 displays on a display 20 the screen where the EMD registration carbon button 311 has been arranged, as shown in drawing 11.
- [0127] When the EMD registration carbon button 311 is clicked, the display operator guidance program 112 requires transmission of the key 301 for authentication which the EMD registration server 3 has recorded on the EMD registration server 3 beforehand with data (a personal computer's 1 a name, a credit number, etc. of a user) required for ID of the contents manager 111 and registration which have been memorized beforehand, and the EMD selection program 131.
- [0128] When it judges with the EMD registration server 3 having just ID of the contents manager 111 which received, the key 301 for authentication and the EMD selection program 131 are transmitted to the display operator guidance program 112 through a network 2.
- [0129] When it judges with the EMD registration server 3 not having just ID of the contents manager 111 which received, a predetermined error message is transmitted to the display operator guidance program 112 through a network 2. When ID of the contents manager 111 is not just, the display operator guidance program 112 is not made [acquiring the key 301 for authentication, and the EMD selection program 131,

or].

[0130] The display operator guidance program 112 supplies the key 301 for authentication, and the EMD selection program 131 to the contents manager 111, when the key 301 for authentication and the EMD selection program 131 are received from the EMD registration server 3.

[0131] When the key 301 for authentication and the EMD selection program 131 are supplied from the display operator guidance program 112, the contents manager 111 supplies the key 301 for authentication to the program 138 for authentication while installing and starting the EMD selection program 131. The program 138 for authentication stores the acquired key 301 for authentication in the interior.

[0132] The EMD selection program 131 displays on a display 20 the window where the carbon button for making connection with the EMD server 4-1 thru/or either of 4-3 start has been arranged, when it starts, for example, as shown in <u>drawing 12</u>.

[0133] For example, when a carbon button 331 is clicked, the contents manager 111 starts the application 151 for purchase, and makes it connect with the application 151 for purchase with the EMD server 4–1. While the program 138 for authentication performs processing of mutual recognition with the application 151 for purchase using the key 301 for authentication at this time, the application 151 for purchase is made to perform processing of mutual recognition with the EMD server 4–1.

[0134] The application 151 for purchase displays on a display 20 the screen for purchasing the contents shown in <u>drawing 13</u>, when processing of mutual recognition is successful.

[0135] For example, when the carbon button 332 shown in <u>drawing 12</u> is clicked, the contents manager 111 installs the driver 141 for purchase which is plug-in, and makes it connect with the EMD server 4-2 at the driver 141 for purchase. While the program 138 for authentication performs processing of the driver 141 for purchase, and mutual recognition using the key 301 for authentication at this time, the driver 141 for purchase is made to perform processing of mutual recognition with the EMD server 4-2.

[0136] The driver 141 for purchase displays on a display 20 the screen for purchasing the contents shown in <u>drawing 14</u>, when processing of mutual recognition is successful.

[0137] When similarly the carbon button 333 shown in <u>drawing 12</u> is clicked, the contents manager 111 makes it connect with the driver 142 for purchase with the EMD server 4-3. At this time, the program 138 for authentication performs processing of mutual recognition with the EMD server 4-3 through the driver 142 for purchase using the key 301 for authentication.

[0138] In addition, when the check carbon button 334 shown in drawing 12 is checked and contents are received from the EMD server 4-1 thru/or either of 4-3, the contents received (namely, when contents are purchased) are checked out by the

predetermined portable device 6-1 defined beforehand thru/or either of 6-3 while they are stored in the contents database 114.

[0139] Next, a series of processings which read and record contents from CD with which the drive 22 was equipped are explained.

[0140] <u>Drawing 15</u> is drawing showing the example of the display operator guidance window which the operator guidance program 112 displays on a display 20, when registration of EMD is completed and the display operator guidance program 112 is started.

[0141] In order to edit the indicative data 241 for the carbon button 343 for displaying the field which sets up processing of the carbon button 342 for making a display operator guidance window start the carbon button 341 for starting the sound recording program 113, and the EMD selection program 131, check-in, or check-out, and a my selection package, i.e., a my selection package, the carbon button 344 for displaying the field is arranged.

[0142] When the carbon button 345 is chosen, the data corresponding to an original package are displayed on the field 351. When the carbon button 346 is chosen, the data corresponding to a my selection package are displayed on the field 351. When the carbon button 347 is chosen, the data corresponding to a filtering package are displayed on the field 351.

[0143] The data displayed on the field 351 are data about a package, for example, are a package name or an artist name.

[0144] for example, — <u>drawing 15</u> — setting — a package — ** — an indicative data — 221 – one — storing — having — **** — a package — a name — " — the first — " — and — an artist — a name — " — A — Taro — " — and — a package — ** — an indicative data — 221 – two — storing — having — **** — a package — a name — " — second — " — and — an artist — a name — " — A — Taro — " — etc. — the field — 351 — displaying — having .

[0145] The data corresponding to the contents belonging to the package chosen in the field 351 are displayed on the field 352. The data displayed on the field 352 are for example, a music name, performance time amount, or the count that can be checked out.

[0146] For example, in <u>drawing 15</u>, since the package corresponding to the indicative data 221–2 for a package is chosen the music name stored in the indicative data 221–1 for contents corresponding to the contents belonging to the package corresponding to the indicative data 221–2 for a package — "a southern bar" and the count which can be checked out — "..." (3 times is shown) — the music name stored in the list at the indicative data 221–2 for contents — "a north graveyard" and the count which can be checked out — ".." (2 times is shown) etc. is displayed on the field 351.

[0147] In addition, as shown in drawing 15, it not only displays the count which can be

checked out by the number of predetermined graphic forms (for example, a star, the moon, etc. are sufficient), but you may express it as the die length of a figure or a note, such as for example, making 16 diacritical marks correspond at once, and making two 16 diacritical marks or an eighth note correspond to 2 times, or making three 16 diacritical marks or a dotted eighth note (corresponding to 3 times), etc.

[0148] Moreover, the field 348 which displays the image matched with the package or contents chosen on a display operator guidance window is arranged. A carbon button 349 is clicked when reproducing the contents chosen (the voice corresponding to contents is made to output to a loudspeaker 24).

[0149] When a carbon button 345 is chosen and the data corresponding to an original package are displayed on the field 351, and choosing the music name of the predetermined contents currently displayed on the field 352 and operating elimination, the display operator guidance program 112 makes the predetermined contents stored in the contents database 114 corresponding to the music name chosen as the contents manager 111 eliminate.

[0150] <u>Drawing 16</u> is drawing explaining the window which the sound recording program 113 displays on a display 20, when a carbon button 341 is clicked and the sound recording program 113 is started.

[0151] The sound recording program 113 reads the performance time amount of the contents currently recorded on CD from CD with which the drive 22 is equipped, and is made to display it on the field 383. Since a music name is unknown, "it is unknown" is displayed on the part as which the sound recording program 113 displays the music name of the field 383.

[0152] Since each of titles of CD with which the drive 22 is equipped, and artist names is unknown, the sound recording program 113 displays "it is unknown" on the field 382 which displays the field 381 and the artist name which display the title of CD, respectively.

[0153] In the window which the sound recording program 113 displays, when the carbon button 384 further clicked when acquiring the information on CD, and the contents read from CD are recorded on the contents database 114, the carbon button 385 which sets up whether the portable device 6-1 thru/or either of 6-3 are made to check out the contents read from CD is arranged automatically.

[0154] For example, when a carbon button 385 is clicked, the sound recording program 113 displays the pull down menu which shows the portable device 6-1 thru/or the list of 6-3. When a user chooses the portable device 6-1 thru/or either of 6-3 from the pull down menu, a personal computer 1 checks out the contents automatically recorded on the selected portable device 6-1 thru/or either of 6-3 from CD. When a user chooses "he not checking out" out from the pull down menu, when contents are recorded from CD, he does not check out a personal computer 1.

[0155] Moreover, in the window which the sound recording program 113 displays, the

carbon button 386 which directs initiation of the sound recording of the contents currently recorded on CD is arranged.

[0156] <u>Drawing 17</u> is drawing showing the property dialog box which sets up whether the information on CD is acquired from the WWW server 5-1 which the sound recording program 113 displays, or either of 5-2, when the sound recording program 113 acquires the information on CD from the WWW server 5-1 or either of 5-2.

[0157] The field 401 which sets whether the information on CD is acquired from the WWW server 5–1 or either of 5–2 to a property dialog box is arranged. For example, when "CDDB" is set as the field 401, the sound recording program 113 requires transmission of the information on CD of the WWW server 5–1 corresponding to CDDB. For example, when "CDNEW JAPAN" (for example, name of the firm which offers the same service as CDNOW (trademark), or a site) is set as the field 401, the sound recording program 113 requires transmission of the information on CD of the WWW server 5–2 corresponding to CDDB.

[0158] When "CDDB" is set as the field 401, a setup of the field 402 and the field 403 is attained. URL of the 1st site of CDDB is set to the field 402, and URL of the 2nd site of CDDB is set to the field 403.

[0159] When the information on CD is received from the WWW server 5-1 or either of 5-2, the directory (one directory of HDD21) which records the received information is set to the field 404.

[0160] When a carbon button 405 is clicked, the sound recording program 113 The sound recording program 113 accesses based on URL memorized beforehand through a network 2 at a predetermined WWW server. As the information on URL of the 1st site of CDDB and URL of the 2nd site of CDDB is acquired and it is shown in <u>drawing 18</u> It sets up as an informational candidate who sets up as an informational candidate who sets the information on URL of the 1st site of CDDB as the field 402, and sets the information on URL of the 2nd site of CDDB as the field 403.

[0161] If a user sets "CDDB" as the field 401, sets URL of the 1st site of CDDB as the field 402 and sets URL of the 2nd site of CDDB as the field 403 as shown in drawing 19 When the carbon button 384 shown in drawing 16 is clicked, the sound recording program 113 Based on URL set as URL set as the field 402, and the field 403, in the procedure corresponding to "CDDB" which connected with the WWW server 5–1, and was set as the field 401 While requiring the information on CD of the WWW server 5–1, the information on CD is received from the WWW server 5–1.

[0162] When a carbon button 384 is clicked and <u>drawing 20</u> receives the information on CD from the WWW server 5–1, the sound recording program 113 is drawing explaining the window displayed on a display 20. Based on the information on CD received from the WWW server 5–1, the sound recording program 113 displays the title of CDs, such as "Asynkronised", on the field 381. Based on the information on CD received from the WWW server 5–1, the sound recording program 113 displays artist

names, such as "Kuwai", on the field 382.

[0163] Based on the information on CD received from the WWW server 5–1, the sound recording program 113 displays music names, such as "Heat", "Planet", "Black", and "Soul", on the part which displays the music name of the field 383. Similarly, the sound recording program 113 displays artist names, such as "Kuwai", on the part which displays the artist of the field 383.

[0164] When the information on two or more CDs is received from the WWW server 5-1, the sound recording program 113 displays the dialog box shown in <u>drawing 21</u>, and makes it choose whether the information on which CD is used for a user.

[0165] <u>Drawing 22</u> is a dialog box for setting up a retrieval keyword which the sound recording program 113 displays on a display 20, when "CDNEW JAPAN" is set as the field 401 and a carbon button 384 is clicked.

[0166] A carbon button 431 is clicked and an album name is activated, when retrieving the information on CD in a retrieval keyword. The retrieval keyword of an album name is set as the field 441.

[0167] A carbon button 432 is clicked and an artist name is activated, when retrieving the information on CD in a retrieval keyword. The retrieval keyword of an artist name is set as the field 442.

[0168] A carbon button 433 is clicked and a music name is activated, when retrieving the information on CD in a retrieval keyword. The retrieval keyword of a music name is set as the field 443.

[0169] A carbon button 434 is clicked and a quotient lot number number is activated, when retrieving the information on CD in a retrieval keyword. The retrieval keyword of a quotient lot number number is set as the field 444.

[0170] When retrieving the information on CD, a carbon button 431 thru/or 434 are made active [any one] at least.

[0171] For example, as shown in <u>drawing 23</u>, an artist name is made active [a carbon button 434] when retrieving the information on CD in a retrieval keyword, and the character string which shows artist names, such as an "arrowhead", to the field 442 is set up.

[0172] When the carbon button for performing a search arranged at the dialog box for setting up a retrieval keyword is clicked, the sound recording program 113 Based on URL memorized beforehand, in the procedure corresponding to "CDNEW JAPAN" which connected with the WWW server 5-2, and was set as the field 401 While requiring the information on CD of the WWW server 5-2 based on the retrieval keyword set as the AROGU box, the information on CD is received from the WWW server 5-2.

[0173] The WWW server 5-2 transmits the data for displaying the image to which the purchase of CD relevant to the information on searched CD is urged shown in <u>drawing</u> 24 with the information on CD to a personal computer 1. The user of a personal

computer 1 can purchase predetermined CD through a network 2 based on the data for displaying the image to which the purchase of CD is urged.

[0174] When the carbon button 384 for performing a search arranged at the dialog box for drawing 25 to set up a retrieval keyword is clicked and the information on CD is received from the WWW server 5-2, the sound recording program 113 is drawing explaining the window displayed on a display 20. Based on the information on CD received from the WWW server 5-2, the sound recording program 113 displays the title of CDs, such as "ASHINKURONAIZUDO", on the field 381. Based on the information on CD received from the WWW server 5-2, the sound recording program 113 displays artist names, such as an "arrowhead", on the field 382.

[0175] Based on the information on CD received from the WWW server 5–2, the sound recording program 113 displays music names, such as "heat", a "planet", "black", and "Seoul", on the part which displays the music name of the field 383. Similarly, the sound recording program 113 displays artist names, such as an "arrowhead", on the part which displays the artist of the field 383.

[0176] After the sound recording program 113 receives the information on predetermined CD, the sound recording program 113 stores the information on CD in the directory of HDD21 specified as the field 404.

[0177] When a carbon button 384 etc. is clicked and directions of acquisition of the information on CD are received, the sound recording program 113 searches first the directory of HDD21 specified as the field 404. The sound recording program 113 makes it choose whether the dialog box 461 shown in drawing 26 is displayed, and the information on CD stored in the directory specified as the field 404 by the user is used, when the information on CD is stored in the directory specified as the field 404.

[0178] When the carbon button 386 which directs initiation of the sound recording of the contents arranged in the window which the sound recording program 113 displays is clicked, the sound recording program 113 supplies the contents which read contents from CD stored in the drive 22, and were read from CD to the contents manager 111 with the information on CD. Compressing the compression method conversion program 134 of the contents manager 111 by the method of predetermined compression of the contents supplied from the sound recording program 113, the encryption program 135 enciphers the compressed contents. Moreover, the use conditions conversion program 136 is compressed and generates the data of the use conditions corresponding to the enciphered contents.

[0179] The contents manager 111 is compressed and supplies the enciphered contents to the contents database 114 with the data of use conditions.

[0180] The contents database 114 stores the data of use conditions in the use condition file 162 while it generates contents FAIRU 161 and the use condition file 162 corresponding to the contents which received from the contents manager 111 and stores contents in contents FAIRU 161.

[0181] The contents manager 111 supplies the information on CD received from the sound recording program 113, and the data of use conditions to the display operator guidance program 112, when the data of the use conditions corresponding to contents and contents are stored in the contents database 114.

[0182] The display operator guidance program 112 generates the indicative data 201 for an original package, and the indicative data 221 for contents based on the data of the use conditions corresponding to the contents stored in the contents database 114 by processing of sound recording, and the information on CD.

[0183] As shown in drawing 27, when the package name (title of CD) of the original package corresponding to the contents stored in the contents database 114 by processing of sound recording in the display operator guidance window is displayed on the field 351 when the carbon button 345 is chosen and the package is chosen, the music name corresponding to the contents read from CD is displayed on the field 352. [0184] When the carbon button 385 of the window which the sound recording program 113 displays is chosen, it is (activated) and the contents read from CD are recorded on the contents database 114, as shown in drawing 28, the display operator—guidance program 112 displays the field 481 which displays the music name of the contents memorized by the portable device 6–1 beforehand specified as the display operator guidance window thru/or either of 6–3.

[0185] The display operator guidance program 112 makes the portable device 6-1 specified beforehand thru/or either of 6-3 check out the contents which were recorded on the contents database 114 at the contents manager 111 and which were read from CD.

[0186] Thus, when the contents read from CD are recorded on the contents database 114 only by activating the carbon button 385 of the window which the sound recording program 113 displays, the contents read from CD to the portable device 6–1 specified beforehand thru/or either of 6–3 can be made to check out a personal computer 1.

[0187] When the display operator guidance program 112 displays the field 481 on a display operator guidance window, the display operator guidance program 112 In a display operator guidance window The name of the portable package (par cage with which the contents memorized by the portable device 6-1 thru/or either of 6-3 belong) with which the contents memorized by the portable device 6-1 specified beforehand thru/or either of 6-3 belong The carbon button 484 which performs the carbon button 483 and check-in, or check-out for closing the field 482 and the field 481 to display is displayed.

[0188] When the display operator guidance program 112 displays the field 481 on a display operator guidance window, furthermore, the display operator guidance program 112 In a display operator guidance window The carbon button 491 which sets up check—out of the contents corresponding to the music name chosen in the field 352, A setup of the carbon button 492 which sets up check—in of the contents corresponding

to the music name chosen in the field 481, the carbon button 493 which sets up check-in of all the contents corresponding to the contents name displayed on the field 481 and check-in, or check-out The carbon button 494 to cancel is arranged.

[0189] Next, processing of activation of check-in or a setup of check-out and check-in, or check-out is explained.

[0190] The display operator guidance program 112 displays the field 481 which displays the music name of the contents memorized by the portable device 6-1 beforehand specified as the display operator guidance window thru/or either of 6-3, when the carbon button 343 for displaying the field which sets up processing of check-in or check-out is clicked.

[0191] for example, — drawing 29 — being shown — as — the field — 352 — displaying — having — **** — music — a name — " — south — a bar — " — music — a name — " — north — a graveyard — " — and — music — a name — ", when it can stand in a line seven, "is chosen and a carbon button 491 is clicked Can stand in a line seven and check—out of the contents corresponding to "is set up. the display operator guidance program 112 is shown in drawing 30 — as — a music name — the contents corresponding to "a southern bar", and a music name — the contents corresponding to "a north graveyard", and a music name — " — the field — 481 — music — a name — " — south — a bar — " — music — a name — " — north — a graveyard — " — and — music — a name — " — it can stand in a line seven and "is displayed.

[0192] At this time, the display operator guidance program 112 Change "..." (3 times is shown) into ".." (2 times is shown), and it displays. the music name currently displayed on the field 352 — the count corresponding to "a southern bar" which can be checked out — a music name — the count corresponding to "a north graveyard" which can be checked out — ".." (2 times is shown) — "-" (1 time is shown) — changing — displaying — music name" — the count corresponding to [can stand in a line seven and] "which can be checked out — "..." (3 times is shown) is changed into ".." (2 times is shown), and it displays.

[0193] for example, the condition shown in <u>drawing 30</u> to the field 481 — a music name — when "a north graveyard" is chosen and a carbon button 492 is clicked, the display operator guidance program 112 is shown in <u>drawing 31</u> — as — a music name — check—in of the contents corresponding to "a north graveyard" — setting up — the music name from the field 481 — "a north graveyard" is eliminated.

[0194] the music name as which the display operator guidance program 112 is displayed on the field 352 at this time — "count"— corresponding to north graveyard" which can be checked out" (1 time is shown) is changed into ".." (2 times is shown), and it displays.

[0195] Moreover, if the package name currently displayed on the field 351 is dragged and dropped to the field 481, check-out of all the contents belonging to the package

corresponding to the package name by which drag and drop was carried out will be set up.

[0196] Only by setup of a carbon button 491 thru/or the check-in by actuation of 494, or check-out, a personal computer 1 does not perform processing of check-in or check-out.

[0197] When a carbon button 484 is clicked after carrying out a setup of a carbon button 491 thru/or the check-in by actuation of 494, or check-out; the display operator guidance program 112 makes the contents manager 111 perform processing of check-in or check-out. When a carbon button 484 is clicked, namely, the display operator guidance program 112 It is based on a setup of check-in or check-out. To the contents manager 111 [whether contents are made to transmit to the portable device 6-1 thru/or either of 6-3, and] Or while making the predetermined commands (for example, command which makes the predetermined contents which the portable device 6-1 thru/or either of 6-3 have memorized eliminate) corresponding to check-in transmit The data of the use conditions stored in the use condition file 162 corresponding to the transmitted contents or the command are made to update.

[0198] When check-in or check-out is performed, the display operator guidance program 112 updates the historical data stored in the hysteresis data file corresponding to the contents which transmitted, or the transmitted command. Historical data consist of the information which specifies the contents checked in or checked out or the date checked in or checked out in the contents, the portable device 6-1 with which he was checked out in the contents, or the name of 6-3.

[0199] Since processing of a setup of check-in or check-out can be performed in a short time, a user can know quickly the condition after check-in or activation of processing of check-out, the count of processing of the check-in which time amount requires, or check-out can be reduced, and the whole (a setup and activation are contained) time amount required for check-in or check-out can be shortened.

[0200] Next, the actuation of edit to a my selection package, such as adding desired contents to a predetermined my selection package, is explained.

[0201] As shown in <u>drawing 32</u>, the display operator guidance program 112 displays the field 501 which displays the music name corresponding to the contents belonging to a predetermined my selection package etc. on a display operator guidance window, when the carbon button 344 for displaying the field which edits a my selection package is clicked.

[0202] At this time, the display operator guidance program 112 displays the field 502 which displays the package name (stored in either the indicative data 252-1 for a package thru/or 251-S) of the my selection package chosen as the display operator guidance window. When the package name of the my selection package which wishes to edit is set as the field 502, the display operator guidance program 112 displays on the field 501 the music name (stored in the indicative data 221 for contents related

with either the indicative data 252-1 for a package thru/or 251-S) corresponding to the contents belonging to the my selection package which has the package name.

[0203] When the display operator guidance program 112 displays the field 501 on a display operator guidance window, furthermore, the display operator guidance program 112 Processing in which the contents corresponding to the music name chosen as the display operator guidance window in the field 352 are made to belong also to the my selection package with which the package name was displayed on the field 502 (to either the indicative data 252–1 for a package thru/or 251–S) The content ID of the selected indicative data 221 for contents storing — the processing (from either the indicative data 252–1 for a package thru/or 251–S) which eliminates the contents corresponding to the carbon button 521 to perform and the music name chosen in the field 501 from the my selection package with which the package name was displayed on the field 502 the content ID of the selected indicative data 221 for contents — eliminating — the carbon button 522 to perform and the processing (processing contents are made to belong also to a my selection package —) performed before that Or the carbon button 523 which performs processing which cancels either of the processings which eliminate contents from a my selection package is arranged.

[0204] For example, a user can make the contents whose music name is "Polaris", the contents whose music name is a "shooting star", the contents whose music name is "Minami-Alps", the contents whose music name is a "multimillionaire", and the contents whose music name is "a slot 1" belong to the my selection package as which the package name which is "the my best 1" was displayed on the field 502 by actuation to the display operator guidance window which displays the field 501.

[0205] That is, the display operator guidance program 112 makes the content ID of the contents whose music name is "Polaris", the content ID of the contents whose music name is a "shooting star", the content ID of the contents whose music name is "Minami-Alps", the content ID of the contents whose music name is a "multimillionaire", and the content ID of the contents whose music name is "a slot 1" store in the indicative data 251 for a package in which the package name which is "the my best 1" be stored corresponding to predetermined actuation.

[0206] Moreover, if the package name currently displayed on the field 351 is dragged and dropped to the field 501, all the contents belonging to the package corresponding to the package name by which drag and drop was carried out can be made to belong to the my selection package with which the package name was displayed on the field 502. [0207] When the carbon button 346 which is arranged in the display operator guidance window and which displays the data corresponding to a my selection package on the field 351 is activated. The package name corresponding to [as the display operator guidance program 112 is shown in drawing 33] a my selection package to the field 351 ("The my best 1", the "my best 2", the "Snow drive", "a southern island selection", "traveling abroad", etc. are displayed [for example,]), and the music name of the

contents belonging to the my selection package corresponding to the package name chosen etc. is displayed on the field 352.

[0208] When a carbon button 346 is activated and the data corresponding to a my selection package are displayed on the field 351, and choosing the music name of the predetermined contents currently displayed on the field 352 and operating elimination, The display operator guidance program 112 does not make the predetermined contents which it is only eliminating the data of the content ID corresponding to the contents belonging to a package contained in the data 251 for a package display, and are stored in the contents database 114 eliminate.

[0209] Next, the display corresponding to a filtering package and the processing which matches a filtering package and desired contents are explained.

[0210] When the carbon button 347 which is arranged in the display operator guidance window and which displays the data corresponding to a filtering package on the field 351 is activated. The package name corresponding to [as the display operator guidance program 112 is shown in <u>drawing 34</u>] a filtering package to the field 351 for example, the "pop top ten", the "lock top ten", and the "enka top ten" — "The song standard of love", "pop recommendation of the 80s", etc. are displayed, and the music name of the contents belonging to the filtering package corresponding to the package name chosen etc. is displayed on the field 352.

[0211] <u>Drawing 35</u> is drawing explaining processing of generation of a filtering package. The display operator guidance program 112 generates the indicative data 291-1 for a package based on the filtering data 551-1 stored in the historical data stored in the indicative data 221-1-1 for contents thru/or 221-M-p, and the hysteresis data file 184 which are stored in the display data file 182 or its either, and a list at the filtering data file 181.

[0212] The content ID of the contents to which the indicative data 291-1 for a package belongs to the filtering package corresponding to the indicative data 291-1 for a package is stored.

[0213] For example, the indicative data 291-1 for a package stores the content ID of ten specific contents (for example, it corresponds to the music of the pop top ten) specified by the filtering data 551-1.

[0214] The display operator guidance program 112 generates the indicative data 291-2 for a package based on the filtering data 551-2 stored in the historical data stored in the indicative data 221-1-1 for contents thru/or 221-M-p, and the hysteresis data file 184 which are stored in the display data file 182 or its either, and a list at the filtering data file 181.

[0215] The content ID of the contents to which the indicative data 291-2 for a package belongs to the filtering package corresponding to the indicative data 291-2 for a package is stored.

[0216] For example, the indicative data 291-2 for a package stores the content ID of

the contents (for example, music which has the music name in which the alphabetic character of "love" is contained) by which the specific character string specified by the filtering data 551-2 is contained in the music name.

[0217] Similarly, the display operator guidance program 112 generates the indicative data 291-3 for a package thru/or 291-A. The content ID of the contents to which each of the indicative data 291-3 for a package thru/or 291-A belongs to the filtering package corresponding to each of the indicative data 291-3 for a package thru/or 291-A is stored.

[0218] For example, based on the historical data stored in the hysteresis data file 184, the indicative data 291-3 for a package chooses ten contents with many counts most checked out in this one week, and stores the content ID of selected contents.

[0219] Moreover, for example, the indicative data 291-4 for a package chooses at random ten contents which the grand total of performance time amount consists of in 60 minutes, and stores the content ID of selected contents.

[0220] Thus, the display operator guidance program 112 generates a filtering package based on the filtering data 551-1 thru/or 551-A stored in the historical data stored in the indicative data 221-1-1 for contents thru/or 221-M-p, and the hysteresis data file 184 which are stored in the display data file 182 or its either, and a list at the filtering data file 181.

[0221] Through a network 2, the filtering data 551-1 thru/or 551-A are downloaded from a predetermined server, or is recorded on predetermined CD, and is supplied from drive 22. Moreover, the user itself can create the filtering data 551-1 thru/or 551-A.

[0222] For example, if a personal computer 1 generates a new filtering package as it downloads the filtering data 551-1 thru/or 551-A from one or more servers and updates it at predetermined time of day through a network 2 every day even if it does not change the contents currently recorded on the contents database 114, a user can enjoy the combination from which contents differ using the generated new filtering package.

[0223] Next, the image displayed on the field 348 is explained. As shown in <u>drawing 36</u>, the display operator guidance program 112 displays the image connected with the package corresponding to the package name chosen as the field 348, when the package name currently displayed on the field 351 is chosen and the music name currently displayed on the field 352 is not chosen (therefore, contents are not reproduced).

[0224] That is, the display operator guidance program 112 reads the image data which chooses either an image file 183-1 thru/or 183-K, and is stored in either the selected image file 183-1 thru/or 183-K with reference to the data in which the image file name stored in the indicative data 211 for a package, the indicative data 251 for a package, or the indicative data 291 for a package is shown, and displays the image

corresponding to the image data on the field 348.

[0225] When package name" second" of an original package is chosen and the music name currently displayed on the field 352 is not chosen, for example, the display operator guidance program 112 With reference to the data in which the image file name stored in the indicative data 211 for a package is shown, the image data stored in the predetermined image file 183–1 thru/or either of the 183–K is read, and the image corresponding to the image data is displayed on the field 348.

[0226] Moreover, the display operator guidance program 112 is matched with the package corresponding to the package name which is having the image by which drag and drop was carried out chosen by it when drag and drop of the predetermined image is carried out to the field 348, when the package name currently displayed on the field 351 is chosen and the music name currently displayed on the field 352 is not chosen. [0227] Namely, the display operator guidance program 112 The image by which drag and drop was carried out is changed into predetermined methods (for example, JPEG (Joint Photographic Experts Group) etc.). While adjusting and carrying out subtractive color of the size (for example, 30 pixels x 30 pixels etc.) (for example, 256 colors etc.) and storing and recording them on an image file 183 It records as data in which the image file name of either the indicative data 211 for a package corresponding to a package name for the name of the recorded image file 183, the indicative data 251 for a package or the indicative data 291 for a package is shown.

[0228] As shown in <u>drawing 37</u>, the display operator guidance program 112 displays the image connected with the contents corresponding to the music name chosen as the field 348, when the music name currently displayed on the field 352 is chosen and contents are not reproduced. That is, the display operator guidance program 112 reads the image data stored in the predetermined image file 183–1 thru/or either of the 183–K with reference to the data in which the image file name stored in the indicative data 221 for contents corresponding to the contents corresponding to the music name chosen is shown, and displays the image corresponding to the image data on the field 348.

[0229] for example, the package name of an original package — the music name which "second" is chosen and is displayed on the field 352 — "Minami-Alps" chooses — having — contents, when "Minami-Alps" is not reproduced The display operator guidance program 112 refers to the correspondence image file stored in the indicative data 221 for contents corresponding to the contents corresponding to music name" Minami-Alps." The image data stored in the predetermined image file 183–1 thru/or either of the 183–K is read, and the image corresponding to the image data is displayed on the field 348.

[0230] When the data in which an image file name is shown are not set as the indicative data 221 for contents corresponding to the contents corresponding to the music name chosen at this time and the carbon button 345 is set up actively, The

display operator guidance program 112 refers to the data in which the image file name stored in the indicative data 211 for a package to which the contents belong is shown. The image data stored in the predetermined image file 183-1 thru/or either of the 183-K is read, and the image corresponding to the image data is displayed on the field 348.

[0231] When similarly the correspondence image file is not set as the indicative data 221 for contents corresponding to the contents corresponding to the music name chosen and the carbon button 346 is set up actively. The display operator guidance program 112 refers to the data in which the image file name stored in the indicative data 251 for a package to which the contents belong is shown. The image data stored in the predetermined image file 183-1 thru/or either of the 183-K is read, and the image corresponding to the image data is displayed on the field 348.

[0232] When similarly the correspondence image file is not set as the indicative data 221 for contents corresponding to the contents corresponding to the music name chosen and the carbon button 347 is set up actively. The display operator guidance program 112 refers to the data in which the image file name stored in the indicative data 291 for a package to which the contents belong is shown. The image data stored in the predetermined image file 183–1 thru/or either of the 183–K is read, and the image corresponding to the image data is displayed on the field 348.

[0233] Moreover, the display operator guidance program 112 is matched with the contents corresponding to the music name which is having the image by which drag and drop was carried out chosen by it when drag and drop of the predetermined image is carried out to the field 348 when the music name currently displayed on the field 352 is chosen. Namely, the display operator guidance program 112 changes into a predetermined method the image by which drag and drop was carried out, adjusts and carries out subtractive color of the size, and it records it as data in which the image file name of the indicative data 221 for contents corresponding to a music name for the name of the recorded image file 183 is shown while storing and recording on an image file 183.

[0234] As shown in <u>drawing 38</u>, the display operator guidance program 112 displays the image (the so-called image of a spectrum analyzer) in which the signal level of each frequency band (every [for example,] octave) of the voice currently outputted to the field 348 is shown, while reproducing the contents corresponding to the music name currently displayed on the field 352 (while outputting voice from the loudspeaker 24).

[0235] Moreover, by setup of a user, as shown in <u>drawing 39</u>, the display operator guidance program 112 displays the image in which the signal level corresponding to the passage of time of the voice currently outputted in a predetermined period is shown on the field 348, while reproducing the contents corresponding to the music name currently displayed on the field 352.

[0236] As shown in drawing 40 and drawing 41, when the display operator guidance program 112 does not display the fields 351 and 352 by setup of a user and the display operator guidance program 112 is reproducing contents similarly. While displaying the image in which the signal level of each frequency band of the voice currently outputted is shown on the field 348 and not reproducing contents, the image corresponding to the package or contents chosen is displayed on the field 348.

[0237] Next, the contents manager 111 and the display operator guidance program 112 are installed in a personal computer 1, and the processing of registration performed when the display operator guidance program 112 is started first is explained with reference to the flow chart of <u>drawing 42</u>.

[0238] In step S11, the display operator guidance program 112 of a personal computer 1 is connected to the EMD registration server 3 with reference to URL memorized beforehand through a network 2.

[0239] In step S12, the display operator guidance program 112 transmits ID of the contents manager 111 beforehand stored in the contents manager 111 at the EMD registration server 3 with data (a personal computer's 1 a name, a credit number, etc. of a user) required for registration. In addition, you may make it the display operator guidance program 112 transmit ID of the display operator guidance program 112 beforehand stored in the display operator guidance program 112 with data required for registration at the EMD registration server 3 in processing of step S12.

[0240] In step S13, the EMD registration server 3 receives ID of the contents manager 111. In step S14 the EMD registration server 3 It judges whether ID of the contents manager 111 is just. When judged with ID of the contents manager 111 being just, While progressing to step S15 and registering the user of a personal computer 1 based on a personal computer's 1 a name, a credit number, etc. of a user A predetermined number of keys for authentication (for example, it is used for the EMD server 4–1 thru/or the mutual recognition of 4–3) are transmitted to a personal computer 1.

[0241] In step S16, the display operator guidance program 112 receives a predetermined number of keys for authentication transmitted from the EMD registration server 3. In step S17, the EMD registration server 3 transmits the EMD selection program 131 to a personal computer 1. In step S18, the display operator guidance program 112 receives the EMD selection program 131 transmitted from the EMD registration server 3.

[0242] In step S19, the display operator guidance program 112 supplies the received EMD selection program 131 to the contents manager 111. In step S20, the contents manager 111 starts the EMD selection program 131, and ends processing.

[0243] In step S14, when judged with ID of the contents manager 111 not being just, it progresses to step S21 and the EMD registration server 3 transmits a predetermined error message to a personal computer 1, without registering. In step S22, the display operator guidance program 112 receives the error message which the EMD

registration server 3 transmitted.

[0244] In step S23, the display operator guidance program 112 displays the error message which received, and ends processing.

[0245] Thus, a personal computer 1 acquires the authentication key used for the EMD server 4–1 thru/or the mutual recognition of 4–3, and the EMD selection program 131, when the display operator guidance program 112 is started first.

[0246] Next, with reference to the flow chart shown in <u>drawing 43</u>, processing of the sound recording from CD by the sound recording program 113 is explained. In step S41, the sound recording program 113 operates drive 22, reads the data (a number or sound recording time amount of contents etc.) corresponding to the contents currently recorded on CD with which the drive 22 is equipped, and displays the list of the contents currently recorded on the predetermined window by CD.

[0247] In step S42, when it judges whether the carbon button 384 which acquires the information corresponding to CD was clicked and is judged with the carbon button 384 which acquires the information corresponding to CD having been clicked, the sound recording program 113 progresses to step S43, and performs acquisition processing of the information corresponding to CD. The detail of acquisition processing of the information corresponding to CD is later mentioned with reference to the flow chart of drawing 44.

[0248] In step S44, the sound recording program 113 displays the information corresponding to CD acquired by processing of step S43 in the predetermined window. [0249] In step S42, since it is not necessary to acquire the information corresponding to CD when judged with the carbon button 384 which acquires the information corresponding to CD not being clicked, step S43 and step S44 are skipped, and procedure progresses to step S45.

[0250] In step S45, when the sound recording program 113 judges whether the carbon button 386 which directs initiation of the sound recording of the contents currently recorded on CD was clicked and it is judged with the carbon button 386 not being clicked, return and a carbon button 386 repeat processing of a judgment to it until a click is clicked by step S45.

[0251] In step S45, when judged with the carbon button 386 having been clicked, it progresses to step S46 and the sound recording program 113 acquires the contents selection information which shows whether which contents currently recorded on CD based on the check set as the field 383 corresponding to the music name are recorded. In step S47, the sound recording program 113 reads the contents chosen from CD based on contents selection information.

[0252] The sound recording program 113 makes the contents read from CD to the compression method conversion program 134 of the contents manager 111 compress by predetermined methods, such as ATRAC3, in step S48. The sound recording program 113 makes the contents which are predetermined cipher systems, such as

DES, and were compressed into the encryption program 135 of the contents manager 111 encipher in step S49.

[0253] The sound recording program 113 makes the contents compressed and enciphered store in the contents database 114 in step S50. The sound recording program 113 makes the data of the use conditions which generated the data of the use conditions corresponding to the contents stored in the contents database 114, and were generated in the contents database 114 store in the use condition file 162 (matched with the contents stored in the contents database 114) in step S51. In step S52, the sound recording program 113 updates the display data file 182 based on the information corresponding to the generated data or CD of use conditions.

[0254] In step S53, when it judges whether the carbon button 385 which sets up that it is making the portable device 6-1 thru/or either of 6-3 check out the contents read from CD (automatic check-out) is active and is judged with a carbon button 385 being active, the sound recording program 113 progresses to step S54, and starts the display operator guidance program 112.

[0255] In step S55, the sound recording program 113 makes the portable device 6-1 thru/or either of 6-3 check out the contents stored in the contents database 114 to the display operator guidance program 112, and ends processing to it.

[0256] In step S53, since he does not need to check out when judged with a carbon button 385 not being active, processing of step S54 and step S55 is skipped, and processing is ended.

[0257] Thus, if a carbon button 385 is activated and processing of the sound recording from CD is performed, he will check out a personal computer 1 automatically to the portable device 6–1 thru/or either of 6–3 while it stores in the contents database 114 the contents read from CD.

[0258] In addition, while the display operator guidance program 112 stores the contents which received in the contents database 114, the contents manager 111 is made to check it out to the portable device 6-1 thru/or either of 6-3, when the check carbon button 334 is checked and contents are similarly received from the EMD server 4-1 thru/or 4-3.

[0259] Next, the acquisition processing of the information corresponding to CD by the sound recording program 113 corresponding to step S43 of <u>drawing 43</u> is explained with reference to the flow chart of <u>drawing 44</u>.

[0260] In step S71, the sound recording program 113 retrieves the information currently recorded on the predetermined directory (for example, directory of HDD21 specified in the field 404 of a dialog 461).

[0261] In step S72 the sound recording program 113 The data corresponding to the contents currently recorded on CD with which the drive 22 is equipped It judges whether the information corresponding to CD is recorded on the predetermined directory (for example, based on the number of music, or performance time amount).

When judged with the information corresponding to CD not being recorded on a predetermined directory, it progresses to step S73 and judges whether CDNEW is chosen or not based on the character string set as the field 401.

[0262] In step S73, when judged with CDNEW being chosen, it progresses to step S74 and the sound recording program 113 is connected to the server (for example, WWW server 5–2) corresponding to CDNEW through a network 2. In step S75, the sound recording program 113 displays on a display 20 the screen (for example, dialog box shown in drawing 22) for inputting a retrieval keyword. In step S76, the sound recording program 113 transmits retrieval keywords, such as an album name inputted based on the screen, an artist name, a music name, or a quotient lot number number, to the server corresponding to CDNEW.

[0263] In step S77, the sound recording program 113 receives the information corresponding to CD from the server corresponding to CDNEW.

[0264] In step S78, the sound recording program 113 matches the information corresponding to CD with contents, and ends processing.

[0265] In step S73, since CDDB is chosen when judged with CDNEW not being chosen namely, it progresses to step S79 and the sound recording program 113 is connected through a network 2 at the server (for example, WWW server 5–1) corresponding to CDDB based on URL of the 2nd site of CDDB set as URL and the field 403 of the 1st site of CDDB which are set as the field 402. In step S80, the sound recording program 113 transmits the data corresponding to the performance time amount of the contents currently recorded on CD to the server corresponding to CDDB.

[0266] In step S81, the sound recording program 113 receives the information corresponding to CD from the server corresponding to CDDB.

[0267] The dialog box as which it is made to choose it whether the information on one of CDs is used for a user by progressing to step S83 when judged with it judging whether there are two or more candidates in the data corresponding to CD received from the server on step S82 and corresponding to CDDB in the sound recording program 113, and there being two or more candidates is displayed.

[0268] In step S84, based on the input to a dialog box, the sound recording program 113 chooses one of candidates, progresses to step S78, matches the information corresponding to CD with contents, and ends processing.

[0269] In step S82, when judged with two or more candidates not being found, procedure progresses to step S78, and the sound recording program 113 matches with contents the information corresponding to CD received from the server corresponding to CDDB, and ends processing.

[0270] When judged with the information corresponding to CD being recorded on the predetermined directory in step S72, it progresses to step S85, and the sound recording program 113 matches with contents the information corresponding to CD which read the information corresponding to CD currently recorded, and was

progressed and read to step S78, and ends processing.

[0271] As mentioned above, the sound recording program 113 acquires the information corresponding to CD from either of two or more servers from which the procedure of retrieval differs. Moreover, the sound recording program 113 uses the information currently recorded, when the information corresponding to CD is being acquired and recorded on the past.

[0272] Next, the processing of generation of the filtering package by the display operator guidance program 112 performed, for example when a carbon button 437 is clicked is explained with reference to the flow chart of <u>drawing 45</u>. In step S101, the display operator guidance program 112 chooses the first filtering data 551 551-1 stored in the filtering data file 181, for example, filtering data.

[0273] In step S102, the display operator guidance program 112 computes the weight to contents the data stored in the display data file 182 and the historical data stored in the hysteresis data file 184 or its either, and based on the selected filtering data 551.

[0274] In step S103, the display operator guidance program 112 chooses the contents belonging to the filtering package corresponding to the filtering data 551 chosen based on the weight to the contents computed by processing of step S102.

[0275] In step S104, the display operator guidance program 112 registers the contents chosen at step S103 into the filtering package corresponding to the filtering data 551 chosen. That is, the display operator guidance program 112 stores the content ID corresponding to the contents chosen as the indicative data 291 for a package corresponding to the filtering package corresponding to the selected filtering data 551. [0276] In step S105 the display operator guidance program 112 It judges whether contents were registered into the filtering package corresponding to all the filtering data 551 stored in the filtering data file 181. When judged with having not registered contents into the filtering package corresponding to all the filtering data 551, It progresses to step S107, the following filtering data 551 stored in the filtering data file 181 are chosen, and processing of registration of return and contents is repeated to step S102.

[0277] In step S105, when judged with having registered contents into the filtering package corresponding to all the filtering data 551, processing is ended.

[0278] Thus, based on the data stored in the display data file 182 and the historical data stored in the hysteresis data file 184 or its either, and the selected filtering data 551, the display operator guidance program 112 chooses contents, and registers selected contents into a filtering package.

[0279] Next, for example, when displaying the field 481 on a display operator guidance window, processing of the check-out or check-in which the operator guidance program 112 and the contents manager 111 perform is explained with reference to the flow chart of drawing 46.

[0280] In step S121, the display operator guidance program 112 reads the count corresponding to contents which can be checked out from the display data file 182. In step S112, the display operator guidance program 112 displays the count which was read at step S121 and which can be checked out.

[0281] In step S123 the display operator guidance program 112 It judges whether the carbon button 492 which sets up the carbon button 491 or check—in which sets up check—out was clicked. When judged with the carbon button 492 which sets up the carbon button 491 or check—in which sets up check—out having been clicked, It progresses to step S124 and check—in of the contents corresponding to the music name chosen in check—out of the contents corresponding to the music name chosen in the field 352 or the field 481 is set up.

[0282] In step S125, corresponding to check-out of the contents corresponding to the music name chosen in the field 352 performed at step S124, or a setup of check-in of the contents corresponding to the music name chosen in the field 481, the display operator guidance program 112 updates the count of the indicative data 221 for contents of the display data file 182 which can be checked out, and repeats return and processing to step S121.

[0283] In step S123, when judged with the carbon button 492 which sets up the carbon button 491 and check-in which set up check-out being clicked by neither, it progresses to step S126 and the display operator guidance program 112 judges whether the carbon button 484 which performs check-in or check-out was clicked.

[0284] When judged with the carbon button 484 having been clicked, it progresses to step S127 and the display operator guidance program 112 makes check—in/check—out manager 132 of the contents manager 111 perform check—out or check—in in step S126 corresponding to check—out of contents, or a setup of check—in of contents. Check—in/check—out manager 132 performs check—out or check—in, when it judges whether activation of check—out or check—in is possible and is judged with activation of check—out or check—in being possible for every contents based on the data of the use conditions stored in the use condition file 162.

[0285] When judged with activation of check-out or check-in not being possible, check-in/check-out manager 132 does not perform check-out or check-in.

[0286] The display operator guidance program 112 makes the count of the data of the use conditions stored in the use condition file 162 (it corresponds to the contents at which he checked out or checked in) of the contents database 114 at check-in/check-out manager 132 of the contents manager 111 which can be checked out update in step S128 corresponding to check-out of contents, or activation of check-in of contents.

[0287] Setting to step S129, the display operator guidance program 112 reads the count which can be checked out from the data of the use conditions stored in the use condition file 162 corresponding to the contents which checked out or checked in at

check-in/check-out manager 132.

[0288] In step S130, based on the count which was read by processing of step S129 and which can be checked out, the display operator guidance program 112 updates the indicative data 221 for contents of the display data file 182, and repeats return and processing to step S121 while it updates the historical data stored in the hysteresis data file 184.

[0289] In step S126, since check-out or check-in is not performed when judged with the carbon button 484 not being clicked, return and processing are repeated to step S121.

[0290] Thus, the display operator guidance program 112 makes the contents manager 111 perform check-out or check-in based on a setup of check-out or check-in while changing a display corresponding to a setup of check-out or check-in.

[0291] Next, when drag and drop of the predetermined image is carried out to the field 348, processing of the attachment of an image performed by the display operator guidance program 112 is explained with reference to the flow chart of <u>drawing 47</u>. In step S151, a method is changed by changing into predetermined size the image by which drag and drop was progressed and carried out to step S152 when judged with the display operator guidance program 112 judging whether the package is chosen or not, and the package being chosen, and subtractive color is carried out.

[0292] In step S153, the display operator guidance program 112 stores in an image file 183 the image by which subtractive color was changed and carried out by processing of step 152.

[0293] In step S154 the display operator guidance program 112 When it judged whether contents would be chosen or not and judged with contents not being chosen, It progresses to step S155 and an image file 183 and the package chosen are associated (). That is, the processing recorded as data in which the image file name of either the indicative data 211 for a package corresponding to a package for the name of the recorded image file 183, the indicative data 251 for a package or the indicative data 291 for a package is shown is ended.

[0294] In step S154, when judged with contents being chosen, it progresses to step S156, and the display operator guidance program 112 associates an image file 183 and the contents chosen (that is, it records as data in which the image file name of the indicative data 221 for contents corresponding to contents for the name of the recorded image file 183 is shown), and ends processing.

[0295] In step S151, since there is no object which matches an image when judged with the package not being chosen, it progresses to step S157, and the display operator guidance program 112 displays a predetermined error message, and ends processing.

[0296] Thus, the display operator guidance program 112 can do what the image DORAKKU and dropped is stuck on a package or contents for (an image, a package, or

contents is connected).

[0297] Next, processing of the display of an image performed by the display operator guidance program 112 is explained with reference to the flow chart of drawing 48. In step S181, the display operator guidance program 112 judges whether when it judges whether contents are reproduced or not and judged with contents not being reproduced, it progresses to step S182 and the package is chosen.

[0298] In step S182, when judged with the package not being chosen, it progresses to step S183, and the display operator guidance program 112 displays the image (for example, image in which the provider of the display operator guidance program 112 is shown) beforehand set to the field 348, and repeats processing of return and a display to step S181.

[0299] In step S182, when judged with the package being chosen, it progresses to step S184 and the display operator guidance program 112 judges whether contents are chosen or not.

[0300] When judged with contents not being chosen in step S184, it progresses to step S185. The display operator guidance program 112 the package chosen — a related attachment ******* image — the field 348 — displaying (the data in which the image file name stored in the indicative data 211 for a package is shown being referred to) The image data stored in the predetermined image file 183—1 thru/or either of the 183—K is read, and processing of return and a display is repeated to step S181 which displays the image corresponding to the image data on the field 348.

[0301] In step S184, when judged with contents being chosen, it progresses to step S186 and judges whether the display operator guidance program 112 has the image related with the contents chosen.

[0302] When judged with there being an image related with the contents chosen in step S186, it progresses to step S187. The display operator guidance program 112 the contents chosen — a related attachment ******* image — the field 348 — displaying (the data in which the image file name stored in the indicative data 221 for contents corresponding to the contents chosen is shown being referred to) The image data stored in the predetermined image file 183–1 thru/or either of the 183–K is read, and processing of return and a display is repeated to step S181 which displays the image corresponding to the image data on the field 348.

[0303] when judged with there being no image related with the contents chosen in step S186, it progresses to step S188, and the display operator guidance program 112 displays a related attachment ******** image on the package with which the contents chosen belong in the field 348, and repeats processing of return and a display to step S181.

[0304] When judged with contents being reproduced in step S181, it progresses to step S189. The display operator guidance program 112 It judges whether the display of the signal level of the voice corresponding to each frequency band is set up. When

judged with the display of the signal level of the voice corresponding to each frequency band being set up, it progresses to step S190, the signal level of the voice corresponding to each frequency band is displayed on the field 348, and processing of return and a display is repeated to step S181.

[0305] In step S189, when judged with the display of the signal level of the voice corresponding to each frequency band not being set up, it progresses to step S191, and the display operator guidance program 112 displays the wave (signal level corresponding to the passage of time of the voice currently outputted) of the voice currently outputted to the field 348, and repeats processing of return and a display to step S181.

[0306] Thus, the display operator guidance program 112 displays the image related with the field 348 by the package, the image related with contents, the signal level of the voice corresponding to each frequency band, or wave-like either of the voice currently outputted corresponding to the condition of a package or selection of contents, or playback of contents.

[0307] In addition, the display operator guidance program 112 may display on the field 348 the image in which the level of the voice which is carrying out the current output is shown, while reproducing contents by setup of a user.

[0308] Moreover, although it was explained that the method with which a personal computer 1 compresses contents was ATRAC3, which compression method is sufficient not only as ATRAC3 but MP3 (Moving Picture ExpertsGroup 2 Audio Layer 3), TwinQV (trademark), or AAC (MPEG 2 Advance AudioCoding) etc.

[0309] In addition, although it was explained that the method with which a personal computer 1 enciphers contents was DES, which cipher system is sufficient not only as DES but IDEA (International Data Encription Algorithm), RAS which is a public key cryptosystem, or a elliptic curve cryptosystem etc.

[0310] Moreover, the contents manager 111 is formed independently in the interior of a personal computer 1, and it may be made to perform it on the hardware which cannot read direct contents manager 111 self from a personal computer 1. Moreover, you may make it the hardware which performs the contents manager 111 have tamper-proof nature.

[0311] Although a series of processings mentioned above can also be performed by hardware, they can also be performed with software. When performing a series of processings with software, the program which constitutes the software is installed in a general-purpose personal computer etc. from a program storing medium possible [performing various kinds of functions] by installing the computer built into the hardware of dedication, or various kinds of programs.

[0312] The program storing medium which stores the program which is installed in a computer and made into the condition which can be performed by computer As shown in <u>drawing 2</u> or <u>drawing 3</u>, a magnetic disk 41 or 91 (a floppy disk is included), an

optical disk 42 or 92 (CD-ROM (Compact Disc-Read Only Memory) —) DVD (Digital Versatile Disc) is included. The package media which consist of a magneto-optic disk 43, 93 (MD (Mini-Disc) is included), semiconductor memory 44, 94, etc., Or a program is constituted by ROM12 stored temporarily or permanently or 62, HDD21, 71, etc. Storing of the program to a program storing medium is performed through the interface of the communications departments 25 or 73 etc. using the communication media of cables or wireless, such as the networks 2, such as a Local Area Network or the Internet, and digital satellite broadcasting, if needed.

[0313] In addition, in this specification, even if the processing serially performed in accordance with the sequence that the step which describes the program stored in a program storing medium was indicated is not of course necessarily processed serially, it is a juxtaposition thing also including the processing performed according to an individual.

[0314] Moreover, in this specification, a system expresses the whole equipment constituted by two or more equipments.

[0315]

[Effect of the Invention] According to an information processor according to claim 1, the information processing approach according to claim 2, and the program storing medium according to claim 3 Based on the 1st procedure, transmission of the information corresponding to contents is required of the 1st information offer equipment. Based on the 2nd procedure, transmission of the information corresponding to contents is required of the 2nd information offer equipment. Since the 1st information offer equipment or the 2nd information offer equipment is set up and the 1st demand means or the 2nd demand means was chosen based on the setup, information can be acquired from the information offer equipment which requires a simply different procedure.

DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]

[Drawing 1] It is drawing showing the gestalt of 1 operation of the music data management system concerning this invention.

[Drawing 2] It is drawing explaining the configuration of a personal computer 1.

[Drawing 3] It is drawing explaining the configuration of the EMD registration server 3.

[Drawing 4] It is a block diagram explaining the configuration of the function of a personal computer 1.

[Drawing 5] It is drawing showing the example of the data of use conditions.

[Drawing 6] It is drawing explaining the example of relation with the indicative data 201 for an original package, the contents file 161-1, or 161-N belonging to the display data file 182.

[Drawing 7] It is drawing showing the example of a configuration of the display data file 182.

[Drawing 8] It is drawing explaining the relation between the indicative data 241 for a my selection package, the contents file 161-1, or 161-N.

[Drawing 9] It is drawing explaining the relation between the indicative data 281 for a filtering package, the contents file 161-1, or 161-N.

[Drawing 10] It is drawing explaining processing of registration of EMD.

[Drawing 11] It is drawing showing the example of the screen for performing processing of registration.

[Drawing 12] It is drawing showing the example of the screen which the EMD selection program 131 displays.

[Drawing 13] It is drawing showing the example of the screen which the application 151 for purchase displays.

[Drawing 14] It is drawing showing the example of the screen which the driver 141 for purchase displays.

[Drawing 15] It is drawing showing the example of a display operator guidance window.

[Drawing 16] The sound recording program 113 is drawing explaining the example of the window displayed on a display 20.

[Drawing 17] It is drawing showing the property dialog box which sets up selection of the WWW server 5-1 or either of 5-2.

[Drawing 18] It is drawing showing the property dialog box which sets up selection of the WWW server 5-1 or either of 5-2.

[Drawing 19] The sound recording program 113 is drawing explaining the example of the window displayed on a display 20.

[Drawing 20] The sound recording program 113 is drawing explaining the example of the window displayed on a display 20.

[Drawing 21] The sound recording program 113 is drawing explaining the example of the dialog box displayed on a display 20.

[Drawing 22] The sound recording program 113 is drawing explaining the example of the dialog box displayed on a display 20.

[Drawing 23] The sound recording program 113 is drawing explaining the example of the dialog box displayed on a display 20.

[Drawing 24] The sound recording program 113 is drawing explaining the example of the window displayed on a display 20.

[Drawing 25] The sound recording program 113 is drawing explaining the example of the window displayed on a display 20.

[Drawing 26] The sound recording program 113 is drawing explaining the example of the dialog box 461 displayed on a display 20.

[Drawing 27] It is drawing showing the example of a display operator guidance window.

[Drawing 28] It is drawing showing the example of a display operator guidance window.

[Drawing 29] It is drawing showing the example of a display operator guidance window.

[Drawing 30] It is drawing showing the example of a display operator guidance window.

[Drawing 31] It is drawing showing the example of a display operator guidance window.

[Drawing 32] It is drawing showing the example of a display operator guidance window.

[Drawing 33] It is drawing showing the example of a display operator guidance window.

[Drawing 34] It is drawing showing the example of a display operator guidance window.

[Drawing 35] It is drawing explaining processing of generation of a filtering package.

[Drawing 36] It is drawing showing the example of a display operator guidance window.

[Drawing 37] It is drawing showing the example of a display operator guidance window.

[Drawing 38] It is drawing showing the example of a display operator guidance window.

[Drawing 39] It is drawing showing the example of a display operator guidance window.

[Drawing 40] It is drawing showing the example of a display operator guidance window.

[Drawing 41] It is drawing showing the example of a display operator guidance window.

[Drawing 42] It is a flow chart explaining processing of registration.

[Drawing 43] It is a flow chart explaining processing of the sound recording from CD.

[Drawing 44] It is a flow chart explaining processing of acquisition of the information corresponding to CD.

[Drawing 45] It is a flow chart explaining processing of generation of a filtering package.

[Drawing 46] It is a flow chart explaining processing of check-out or check-in.

[Drawing 47] It is a flow chart explaining processing of attachment of an image.

[Drawing 48] It is a flow chart explaining processing of a display of an image.

[Description of Notations]

1 Personal Computer 2 Network, 3 EMD registration server 11 CPU, 12 ROM 13 RAM, 21 HDD 41 magnetic disks, 42 Optical disk 43 A magneto-optic disk, 44 Semiconductor memory 61 CPU, 62 ROM 63 RAM, 71 HDD 91 A magnetic disk, 92 Optical disk 93 A magneto-optic disk, 94 Semiconductor memory 111 Contents manager 112 Display operator guidance program 113 A sound recording program and 114 Contents database 131 An EMD selection program, 132 Check-in/check-out manager, 133 Cipher system conversion program 134 compression method conversion program 135 Encryption program 136 Use condition conversion program 137 Signature manager 138 Authentication program 139 A decode program, 140 The driver for PD, 141 Driver for purchase 142 Driver for purchase 181 Filtering data file 182 Display data file 183 Image file 184 A hysteresis data file, 301 Key for authentication

[Translation done.]